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RU CYBER DEFENSE TEAM PLACES THIRD IN THE MID ATLANTIC COLLEGIATE CYBER DEFENSE CHALLENGE

Congratulations to the RU team for a third-place finish in the Mid-Atlantic Collegiate Cyber Defense Competition finals held at the Johns Hopkins Applied Physics Lab in Laurel, Maryland March 26-29, 2014.

This was the third year in a row that the team has been in the top three in a very competitive tournament. 2014 was the closest contest in CCDC history.

Cyber Defense Club President Eileen Hindmon and CCDC team member said “A competition such as this one, mimics a real world scenario: The teams are put in situations where they are expected to make decisions on the fly, while under intense pressure, complete assignments with unreasonable deadlines, and defend systems that have already been exploited. It is pretty intense, but a lot of fun.” She adds “I knew we had a strong team dynamic, and this was proven by the way our team interacted with each and how focused our team remained on the tasks at hand. Also, the ability of the team to multitask and take over different roles when needed.”

Teammate Chris Huntington added “I thought it was a really incredible experience. It gave me an opportunity to shmooze a bit with some of the security professionals in the area, and has really been a determining factor in my career path. After the 96 straight hours of security lectures, discussions on strategy, and taking tours, I still wanted more. I take that is a pretty good sign. “  Chris went on to say that “The third consecutive 3rd place win was really bittersweet. I am very proud of our team, every member played their role so well, and it ended up a very tight finish. However, this victory just solidifies the idea that Radford University consistently produces excellent security students, and that to me feels like quite an accomplishment.”

Lloyd Jones agreed with his fellow team members “I think that our consistent placing in this competition shows that RU is a college that cares about Information Security and teaches its students necessary skills to succeed in these competitions and in the workplace.” Lloyd pointed out that the team experienced some challenges along the way stating “Although our initial strategy of taking down our entire network in order to secure every machine on it didn’t pan out as we thought it would, we made a great comeback on the second day to secure third place. I really hope that our hard work preparing for competitions like these influences future members of the Cyber Defense Club.”

Congratulations again to team members: Eileen Hindmon, Brock Shelton, Lloyd Jones, Alex Newton, Doug Anderson, Robert Russ, Chris Huntington, Justin Arnold, Justin Matthews, Josh Snow and Eric Bartocci. The team is coached by Dr. Prem Uppuluri of the Radford University Department of Information Technology. For more information, please visit the competition website http://maccdc.org/. 
Radford University geology students and faculty will present talks or poster sessions of original research at the 68th annual conference of the Southeast Section of the Geological Society of America (GSA) April 10-11 at Virginia Tech. More than 40 RU students and faculty will also attend the regional meeting of the professional society for geology and earth sciences.

"This is a tremendous opportunity for our students to showcase their research through presentations and published abstracts, as well as to network with colleagues, potential graduate schools and employers," said Elizabeth McClellan, associate professor of geology.

In the New Directions in Southern Appalachian Geologic Research symposium, Melissa Brett, Raymundo Balderas and David Sublett will join McClellan for a talk on their research project, titled "Provenance of Conglomerates in the Mount Rogers Formation, SW VA, and Implications for the Neoproterozoic Geologic History in the Blue Ridge."

The scientific program is composed of oral and poster presentations organized into 17 themed sessions plus an array of research in general discipline areas. RU students making oral presentations will be:

Adam Szyikowski ’13 on research done with Brian Havens, titled "Application of 3D Photogrammetry to Rock Slope Stability Analysis" in the Geohazards: Methods for Mapping, Monitoring, and Mitigating session. Their faculty mentor was Professor of Geology Skip Watts.


Poster presentations will be made by:

Nick Aitcheson and William Wilson on their research titled "Application of Terrestrial-based LIDAR for the Collection of Discontinuity Orientation Data and its Validity Compared to Traditional Methods" in the Geohazards: Methods for Mapping, Monitoring, and Mitigating session. Their faculty mentor was Watts.

Brett, Balderas and Sublett on their research titled "Redefining Boundaries in the Neoproterozoic Lower Mount Rogers Formation through Detailed Mapping of Rhyolite Contacts" in the Geologic Maps, Geophysical Maps, Digital Geologic Maps, and Derivatives from Geologic and Geophysical Maps session. Their faculty mentor was McClellan.

Sublett, Balderas, and Brett on their project titled "Characterization of the Bearpen Rhyolite, a Previously Undescribed Unit in the Mount Rogers Formation" during the Undergraduate Research in the Southeastern Section session. Again, the project was produced under the faculty mentorship of McClellan.
Kelsey McGee, Emily Luketic and George Ritter on their research titled "Simple Direct Shear Testing Techniques for Rock Slope Stability Analysis" in the Geohazards: Methods for Mapping, Monitoring, and Mitigating session. Their faculty mentor was Watts.

Tess Rogers, on her research, co-authored with Geology Professor Parvinder Sethi, titled "Micro-cultural and Socio-economic Analysis of the Introduction of Hydraulic Fracturing within the Triassic Cow Branch Formation within the Dan River Basin, North Carolina, U.S.A." in the Hydrocarbon Recovery using Fracking Technologies session.

Oral presentations by RU faculty will be made by:

Jonathan Tso, chair of the department of geology, on “Revising the Geology of Virginia CD-ROM Series from the Web” in the Geospatial Visualizations in Teaching, Research, and Societal Applications sessions.


Tso pointed out that students from two classes – GEO 312 and 441 - will be attending the two-day conference with support from the Scholar-Citizen Initiative.

"I don’t know of another university that has made this level of commitment to introducing its students to a professional society experience," he said. Tso also acknowledged additional support from the Office of Undergraduate Research and Scholarship.

The theme of the conference, produced cooperatively by RU's Department of Geology and those from Virginia Tech, William and Mary, James Madison and the Department of Mines, Minerals, and Energy of the Commonwealth of Virginia, is "Elevating Geosciences in the Southeastern U.S.: New Ideas about Old Terranes." The Geological Society of America provides access to elements that are essential to the professional growth of earth scientists at all levels of expertise and from all sectors: academic, government, business, and industry. GSA membership includes thousands of international earth scientists in a common purpose to study the mysteries of our planet and share scientific findings. – Story by Don Bowman
BATS, SNAKES AND VOLES STAR AT THE WILDLIFE SOCIETY’S BIOBLITZ

More than 30 guests, including black rat snakes, snapping turtles, birds and voles, joined the Radford University student chapter of The Wildlife Society (RUTWS) Saturday at Selu Conservancy for its annual Bioblitz.

"It was a fun and rewarding day for all," said Karen Powers, associate professor of biology and RUTWS chapter adviser. "Everybody was able to learn wildlife handling techniques that are marketable and valuable to those who wish to better understand the plants and animals around them."

Matt Close, assistant professor of biology, brought the snapping turtle and black rat snake and showed the safe way to catch a snake and handle a turtle in the wild. Dr. Close was joined by colleagues Gary Cote, professor of biology, who led a wildflower walk and Professor of Biology Bob Sheehy and John Kell, biology instructor, who led a bird walk. Virginia Tech’s School of Forestry and Natural Sciences demonstrated radio telemetry, bat catching and measurement techniques, and electro-fishing, a non-lethal fish sampling protocol.

The early spring day in the field was capped by a barbecue dinner, cooked by Associate Professor of Education Tricia Easterling. Bioblitz capped a productive 2013-2014 RUTWS season as the 20-member group cleaned up local wetlands at Claytor Lake State Park, visited a captive bear facility and Mill Mountain Zoo, made a series of professional research presentations at the Virginia TWS annual meeting.
SCIENCE EXPLORATION DAY CONNECTS ASPIRING YOUNG SCIENTISTS TO THE FUTURE

More than 30 middle school students discovered the wonders of science on Saturday, March 29, when Radford University's College of Science and Technology (CSAT) hosted Science Exploration Day 2014. A total of eight sessions were conducted by Radford University faculty and students with topics ranging from forensic anthropology and geology to computer programming and the biology of bugs.

Pulaski and Montgomery county and Radford city schools were represented with student participants as were several schools outside the New River Valley. The event was designed to allow 6th, 7th and 8th grade students an opportunity for some one on one demonstrations and hands-on experiences from many different areas within the sciences.

Sessions held were:

Programming Animations with Snap! – Students learned to create animations used in video games.

Robotics – Students learned to build and program a working robot using the Lego Mindstorms Robotics Platform.

Cryptology – Students learned how to use numbers, symbols and patterns to make secret codes.

Exploring the frontiers of Bug Biology - Students were able to hold giant cockroaches and to learn how termites track trails as a part of the discussion and experimentation.

Forensic Anthropology – Students learned how to gather information from a human skeleton about the deceased person’s age at death, sex estimation, how tall the person was, and the person’s overall health.

Geology: Uncovering Earth’s Hidden Treasures – Students learned more about the wonders of geology and even had the opportunity to leave with their own set of geologic specimens.

Fun with Physics – Students learned about electromagnetism with experiments in Cathode Ray Tubes and electric current.

RU CSAT STEM club members served as hosts for the program, staffing registration and serving as guides for the students throughout the day.
RU SOCIETY OF PHYSICS STUDENTS TO SPONSOR LECTURE: FIBER OPTIC SENSORS FOR THE OIL AND GAS INDUSTRY

On Friday, April 11 at 4pm, Dr. Dan Provenzano will present a program regarding the use of fiber optic sensors to monitor dynamic situations in oil and gas wells.

Dr. Provenzano is a Senior Optical Scientist at Baker Hughes Oilfield Service Company. He joined the company in 2012 and works in the Fiber Optic Sensors Division. Prior to BH Oilfield, he worked at Orbits Lightwave since its beginning in 2001. Dan designed and directed the manufacturing process for fiber optic lasers and custom fiber Bragg gratings. Dan has a Ph.D. and M.S. in Applied Physics from the California Institute of Technology and a B.S. in Physics from UC Santa Barbara.

The event is sponsored by the RU Society of Physics Students and will take place in Reed Hall 201. There is no charge for admission.

STUDENT AND FACULTY TO PRESENT RESEARCH AT THE AMERICAN ASSOCIATION OF PHYSICAL ANTHROPOLOGY MEETINGS

Brittany Hundman will be presenting her honors research at the American Association of Physical Anthropology meetings in Calgary. The paper on the diet and health of a small slave cemetery in Midlothian, Virginia called the Stonebridge site is co-authored by Dr. Cassady Yoder Urista, Dr. Donna Boyd, and Dr. Cliff Boyd. Brittany conceptualized the idea for the project and collected the samples, which she analyzed with her faculty to determine the results.
In September 2013, two Radford University College of Science and Technology students traveled to South America to participate in a medical mission to the region. Dylan McKnight, President of the RU Pre-Dental Club, and Jacob Mace, President of the RU Pre-Medical Club, were both so moved by the need for equipment to help provide for the medical and dental care of the underprivileged people in Bolivia that they established the “Run for Hope” fundraiser to aid in the purchase of new surgical tools. The event was held on Sunday, April 6, 2014 in Radford’s Bisset Park and was a major success.

“We had an excellent turn out on Sunday” said Dylan. “We had over 50 people register online and had a few more sign up at the park.” He adds “Our 50:50 raffle was a success. We gave away a OralB electric tooth brush (worth $200) and 15 gift cards to restaurants in the area.”

To highlight the need for this equipment and the event, Dylan and Jacob posted the following statistics on the event website: “In Santa Cruz, a city of about 2 million people, and in the Quechua Indian communities of Sucre, a city high up in the Andes Mountains most people are living in extreme poverty and cannot afford even the most basic medical care. Children are dying for lack of simple antibiotics. Mission of Hope is changing the situation by providing free medical care for about 100 patients a day, including free exams, free lab work, free ultrasound, free medicines, and free surgeries. However, the surgical instruments utilized in these hospitals are in need of repair and/or replacement. The goal of the RUN FOR HOPE 5K is to raise money toward surgical instrument improvement. ALL PROCEEDS from this event will be donated directly to MISSION OF HOPE to REPAIR and REPLACE these instruments.”

The team has moved toward their goal, but there is still much to do and people can still participate. “With the raffle, additional race registration, and selling our custom designed t-shirts, we brought in another $250 on Sunday” Dylan states. “In total we have raised $4,500. We still have close to 40 "Run for Hope Supporter" t-shirts left that we are selling for $15 each to help us to reach our $5000 goal.” He adds “of course we will still accept donations at http://www.runforhope.myevent.com/. T-Shirts and more information are available from both Dylan (dsmcknight@radford.edu) and Jacob (jdmace@radford.edu) via email.”
VIRGINIA BLUE RIDGE SECTION AMERICAN CHEMICAL SOCIETY MEETING TO FEATURE SCIENCE WRITER SAM KEAN

On Wednesday, April 16, The Virginia Blue Ridge Section of the American Chemical Society will be conducting their 663rd Section Meeting in Muse Hall. The program will feature poster presentations and recognition of the James Lewis Howe Awardees to honor the outstanding students who are majoring in an area of chemistry in the Colleges and Universities in the Virginia Blue Ridge Local Section. The Howe award winners for 2014 are:

Casey Hazlewood  
Concord University—Chemistry

Sara Parker Puckett  
Ferrum College—Chemistry, Biology, and Pre-professional science

Elizabeth Cheng  
Hollins University—Chemistry

Marissa Estep  
Liberty University—Biochemistry & Molecular Biology and Mathematics

Karen Butler  
Lynchburg College—Chemistry

John “Dennis” Godward  
Radford University—Chemistry

Rose Kohinke  
Roanoke College—Chemistry

Katlyn A. Fleming  
Sweet Briar College—Biochemistry and Molecular Biology

Matthew Nguyen  
Virginia Tech—Biochemistry

Philip J. Pryor  
Virginia Military Institute—Chemistry

Christine (Christy) Mays  
Virginia Tech—Chemical Engineering

Greg Veber  
Virginia Tech—Chemistry

Kathryn E. Driest  
Washington and Lee University—Biochemistry
In conjunction with the meeting, noted Science Writer Sam Kean will be the featured speaker at 8pm in the auditorium at the Bonnie Hurlburt Student Center. Admission is free for this portion of the program.

Sam Kean spent years collecting mercury from broken thermometers as a kid, and now he’s a writer in Washington, D.C. His stories have appeared in The New York Times Magazine, Mental Floss, Slate, Psychology Today, and The New Scientist, among other places, and his work has been featured on “Radiolab” and NPR’s “All Things Considered,” among other shows. Both his books, The Disappearing Spoon and The Violinist’s Thumb, were national bestsellers, and both were named as an Amazon “Top 5” science books of the year. The Disappearing Spoon was nominated by the Royal Society for one of the top science books of 2010, while The Violinist’s Thumb was a finalist for PEN’s literary science writing award. - Bio from Amazon.com

**Spotlight on the James Lewis Howe Award from Radford University for 2014: John “Dennis” Godward**

Mr. Godward is a Chemistry major from Thaxton, VA who will be receiving his B.S. Degree during Commencement in May 2014.

In addition to receiving the James Lewis Howe Award, Mr. Godward has also been recognized with a Grand Champion Award for interdisciplinary research during the Sigma Xi Graduate and Undergraduate Poster Colloquium at George Mason University. He is also a member of the Radford University EPA P3: People, Prosperity and the Planet Student Design Competition for Sustainability team which received one of the 2013 awards. Mr. Godward is a member of Sigma Xi and has been named to the Dean’s List at Radford University.

**MUSEUM OF THE EARTH SCIENCES HOSTS FINAL LECTURE FOR THE SEASON**

On Tuesday evening, April 1st, Christina Byrd, Paleontology Technician, Virginia Museum of Natural History presented "Growing Pains: A paleontologist’s journey to understanding plesiosaur development and growth." This event was sponsored by the Radford University Museum of the Earth Sciences (MES) and was the 6th and final lecture for 2013-2014. The MES has seen great success in the past year, surpassing the 20,000 visitor mark.

Normal hours of operation during the MES open season are:

- Mondays and Wednesdays: 10 a.m.- 4 p.m.,
- Tuesdays and Thursdays: 10 a.m. to noon and 3 p.m. - 4 p.m.,
- 1st and 3rd Saturdays of each month: 10 a.m. to noon
RADFORD UNIVERSITY TO HOST SUMMER BRIDGE PROGRAM JULY 13-18

The Radford University College of Science and Technology Summer Bridge program is a week-long residential experience for rising sophomore, junior, and senior high school girls interested in science, technology, and mathematics. The 2014 edition of the program will take place from Sunday, July 13 – Friday, July 18, 2014.

Thanks to many generous donors and sponsors of the program, full scholarships will be awarded competitively to participants. The scholarships cover all costs of the program.

Through classroom lessons, laboratory experiments, and field experiences, Radford University professors will draw students in to the wonders of:

- Space Exploration—create a Martian rover
- Geology—study the making of mountains
- Forensic Science— combat “hackers” and analyze “crime scenes”
- Genes, Molecules and Medicine - learn about the biology and chemistry applications in medicine
- Environmental Science - studying habitats through examination of the environment

Participants in the program have stated that the interaction with Radford University faculty and staff has been an exceptional experience as has the residential programming. For many, it will be their introduction to a college atmosphere and campus living environment. An experienced staff of Radford University students will join the faculty and professional staff to provide a world-class program for those who attend.

Please help us connect young women interested in the sciences with this outstanding opportunity and pass this message along to those who might be interested. Thanks to support from our sponsors, we will be able to offer the program to even more budding scientists moving from 73 participants to 96.

Applications are now being accepted. To learn more, please visit:
http://www.radford.edu/content/csat/home/summer-bridge.html
RADFORD UNIVERSITY TO HOST CAMP INVENTION JUNE 23-27

For five years, Radford University’s College of Science and Technology has offered the nationally-acclaimed Camp Invention program to children entering grades one through six in Reed and Curie Halls each June. The 2014 edition of the program is scheduled for June 23-27.

For more information, please visit: http://inventnow-web.ungerboeck.com/programsearch/moreinfo.aspx?event=9762

RU GEOGRAPHY CLUB TO PRESENT FILM

The Radford University Geography Club will be hosting a movie titled "180 degrees South" on April 21st in the Bonnie Hurlburt Student Center Auditorium. They will also have a booth set up set up the week of the 14th-19th in the student center. Come by to say Hi and see what they have planned.

RU MATH CLUB SPONSORS SPEAKER

The Radford University Math Club presented: "Monitoring and Improving Surgical Quality" with Dr. Bill Woodall, professor of Statistics at Virginia Tech on Monday, April 7 in Waldron Hall.